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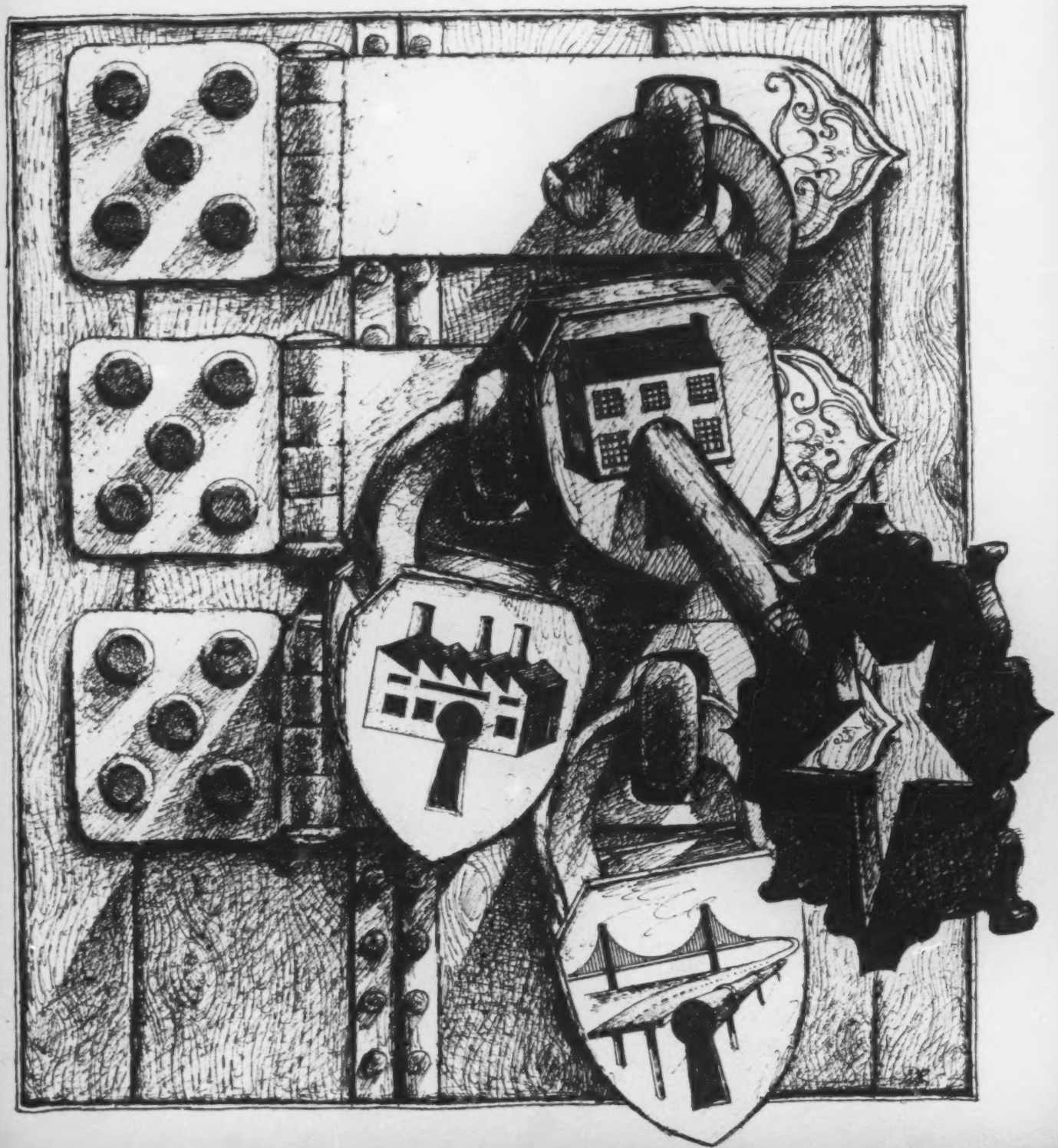
1983 Dodge/Sweet's Construction Outlook

Next Year: More Housing.... But What Else?



In 1983: More Housing....But What Else?

It would be hard to imagine a more oppressive environment than the one surrounding the construction and building materials industry through the spring of 1982. The sky-high mortgage rates of monetarism had reduced *housing starts* to half their potential. Successive rounds of budget-cutting had left programs for *public works construction* starved for funds. And to complete the dismal picture, deepening recession was pulling *nonresidential building* down to the depths of 1975.

The Dodge Index (see chart) clearly shows the results of the steadily worsening market conditions over most of the past year and a half. As the three major submarkets retreated under the awesome combination of tight money, budget cuts, and recession, total construction contracting declined by 20 percent between the beginning of 1981 and the spring of 1982.

Since April, however, the Index has been showing signs of improvement. Over the summer months, contracting staged a partial recovery, regaining roughly a third of what had been lost. Has the construction market turned the corner? Will this recent improvement in contracting continue into 1983?

The aborted recovery of 1980 stands as a warning that upswings can be turned off as easily as they are turned on. In the summer of 1980 a strong recovery took hold soon after the Federal Reserve released its grip on the money market. Yet, recovery lasted only until the end of that year, when the Fed retightened credit. Is there something different about conditions in 1982 that could let this newest recovery develop into the real thing?

It isn't necessary to assume that the principles of monetarism and supply-side economics that have been the cornerstone of economic policy for the past couple of years have suddenly been abandoned. There is ample room within this framework for change to take place. And there is evidence that it is happening. The Federal Reserve, which had continued to insist that interest rates aren't important, is now watching them as closely as it watches M-1. The Administration, which had been convinced that deficits resulting from tax cuts are soon self-correcting, recently took the lead in lobbying for a tax *increase*.

Monetarist and supply-side doctrines have been pushed to their limits. There is nowhere to go from recent extremism except back toward the center, which in this case implies movement in the direction of more traditional conservatism.

The Federal Reserve, having successfully reversed double-digit inflation by means of an overdose of recession, is finally ready and willing to provide a monetary climate that will encourage and support sustained recovery and growth of the economy. The Administration, facing the prospect of a $150-billion deficit in fiscal year 1983, is equally obliged to reverse the trend of ever-larger deficits, even if it means higher taxes and a less ambitious military buildup.

As a more pragmatic approach to economic policy displaces the rigidly dogmatic approach of the first year and a half of Reaganomics, change is taking place–without fanfare, to be sure, and within the boundaries of the Administration's broad economic program. The payoff, a better balance of monetary and fiscal policy, is bound to bring relief to the construction market.

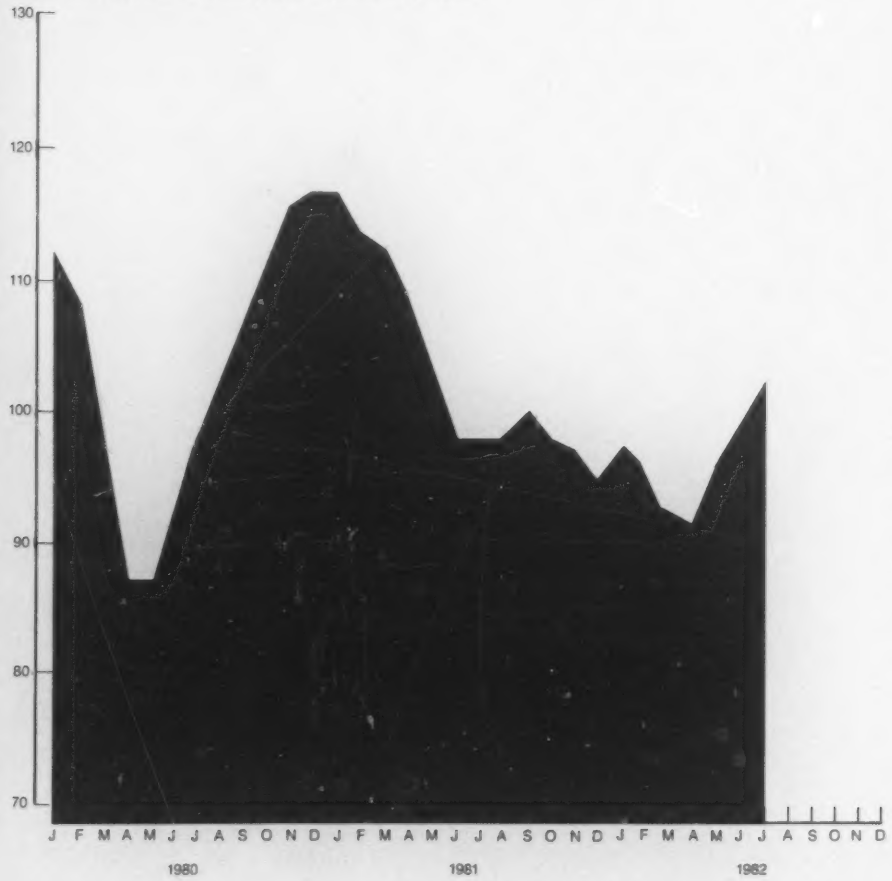
If the fragile recovery of the construction market is to survive this time, a few more things must happen–and at least one thing must *not* happen. The decline in short-term interest rates must carry over to the long-term credit market. The Administration's runaway budget deficit must be brought under control. Inflation must remain at least stable, now that it has subsided. And the Federal Reserve must *not* revert to monetary restraint at the first sign of economic expansion.

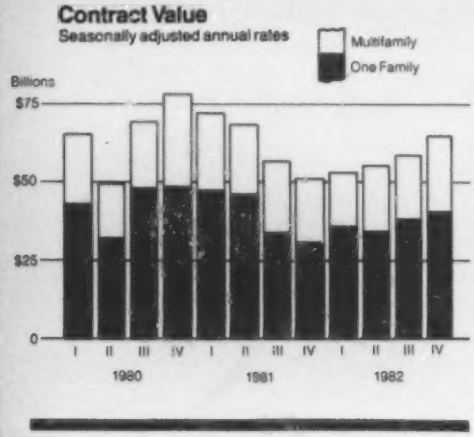
Assuming that these conditions are fulfilled in 1983, the critical issues of the Dodge/Sweet's Construction Outlook are:

- *The mortgage market:* How much will mortgage rates decline, and how much will housing recover?
- *The economy:* How strong will its next expansion be, and what are the prospects for commercial and industrial building in 1983?
- *The New Federalism:* Can local governments provide the necessary infrastructure as federal public works programs are trimmed back?

A Second Try at Recovery

The Dodge Index of Construction Contract Value
(adjusted for seasonal variation and for unusually large projects)





When the construction industry is ready to recover, the place to look for it to happen first is the housing market. The "consensus" housing outlook for 1983 currently clusters tightly around 1.35 million units, implying a 25- to 30-percent improvement from this year's depressed volume of building. If all goes well, next year's prospective gain is likely to be only the first in a series of annual advances that would have the housing market operating in the 1.5- to 1.6-million-unit range in 1984, and still higher by 1985.

Does this sound familiar? It should–because this is almost the identical housing outlook that was in vogue at this time last year. That the prediction never materialized was only one of the many economic disappointments of the past year.

In the fall of 1982, the odds on realizing the long-awaited housing recovery are a good deal higher than they were a year ago. Both times, the key to housing's recovery was a break in interest rates. A year ago, falling interest rates were only a hope; now they are a reality. The mid-1982 decline of short-term interest rates has already begun to pull mortgage rates down, and the decline will continue into next year.

With that kind of head start, the 1983 housing outlook must address the next level of issues:

How far and how fast will mortgage rates decline? Will they stay down? How much improvement in housing is possible in 1983? What about other barriers to recovery–especially housing cost?

If there is any substance to the concept of a "real" rate of interest, mortgages should be headed for a significant decline. At mid-1982, conventional mortgages–then still at 17 percent or higher–carried an unrealistically high inflation-risk factor. A mortgage rate that high might have been justifiable when inflation was still in double digits, but it is hardly appropriate to the current inflationary expectation of 6 to 7 percent. A 17-percent mortgage in 1982's improved inflationary environment implies a "real" rate of interest in excess of 10 percent.

If 5 percent, and not 10 percent, is an appropriate real rate of interest for mortgages in the early and middle 1980s (a high real rate by past standards), the addition of a 6- to 7-percent inflation premium would put the equilibrium mortgage rate at about 12 percent–a long way down from its present level.

Whether or not it is realistic to expect that 12-percent mortgage money will be available at any time in 1983, this theoretical rate indicates the direction that the mortgage market will be heading as long as inflation is held within its current limits. As the gap between inflation and long-term interest rates gradually narrows, perhaps the best that can be expected is that the conventional mortgage rate will ease from 17 percent at mid-1982 to between 15 and 16 percent by year-end, getting down to 13 percent by the end of 1983. As long as mortgage rates continue to move in this direction, there is every reason to anticipate steady improvement of housing starts–a development that has already begun.

Housing Starts In 1983–Like 1980?

There isn't much in the way of experience to serve as a guide to the strength of the next housing recovery. In the spring of 1980, the Fed's flip-flop–from severe monetary restraint to aggressive ease–revealed that the housing market was capable of a strong rebound under the right circumstances. Once the Federal Reserve relaxed its hold on the credit market, the conventional mortgage rate fell sharply–from 16.6 percent in April 1980 to the range of 13 to 14 percent through summer and fall. Housing output responded dramatically. In the nine months from May 1980 to January 1981, housing starts skyrocketed from a low rate of 938,000 units (not far from the 1982 second-quarter low) to a high of 1,660,000 before withering under the Fed's next round of monetary restraint.

In 1982 and 1983, the response of the housing market to falling interest rates is not likely to be as vigorous as it was in 1980. Neither the homebuilding industry nor the thrift institutions are in a position –after nearly three years of stress–to return to business as usual.

For 1982, another disaster year was inevitable. After half a year's building at below the 1-million-unit level (annual rate), the third quarter's reawakening lifted the market to a mere 1.1 million

Assumptions

Key Economic Variables Affecting The Construction Market in 1982 and 1983

	Annual		Quarterly	
	1982	1983	1982:4	1983:4
Economic Output				
Real GNP (% Change)	−1.5	+2.9	+3.0	+4.6
Industrial Production (% Change)	−7.6	+4.8	+2.4	+8.5
Mfg. Capacity Utilization (%)	70	73	70	75
Inflation				
GNP Deflator (% Change)	+6.3	+6.0	+6.3	+6.3
Consumer Prices (% Change)	+6.3	+5.7	+4.3	+5.7
Composite Construction Cost (% Change)	+4.5	+7.0	+6.5	+7.0
Interest Rates				
Short Term (90 Day T-Bills)	10.5	8.5	7.5	9.0
Mortgages (Conventional 30 yr./75%)	16.5	14.5	15.2	13.0
Employment/Unemployment				
Total Unemployment Rate (%)	9.5	9.2	9.7	8.9
White Collar Unemployment Rate (%)	5.0	4.8	5.3	4.6
Business Capital Spending				
Plant and Equipment (Billions)	$319	$324	$311	$339
Buildings (Billions)	$ 64	$ 62	$ 62	$ 64
State & Local Govt. Purchases (Billions)	$388	$410	$398	$417
Federal Government Deficit (Billions)	$145	$163	$175	$165

starts–and that only with the help of some strategically timed HUD financing. A further advance to 1.15 million units in the final quarter will leave the current year's total close to 1,025,000 units. Thus 1982 displaces 1981 for the dubious honor of being the worst housing year in the past 35.

The momentum of the final months of 1982 will set the pace for housing in 1983. A beginning rate of 1.2 million units or better should improve with each succeeding quarter as mortgage rates retreat. By 1983's final quarter, a rate of close to 1.5 million housing starts is within reach (things moved a lot faster than that in 1980), bringing next year's housing start total above 1.3 million units.

Cost And Mix

Once the interest-rate barrier to housing's recovery becomes less formidable, will the high cost of housing be the next obstacle?

Since 1979 (the last "normal" year for housing), the cost of the average new one-family house, excluding land and other nonconstruction costs, has increased by 25 percent, from $46,700 to the current $59,000. Including land, the typical new one-family home now comes to something around $80,000–enough to discourage most young families (and more than a few older ones).

As a consideration in the decision to buy, the $80,000 price tag is not as important as some other numbers, however. Perhaps the most critical one is the monthly payment (amortization, interest, insurance, etc.) in relation to present and prospective income. Simultaneous inflation in homebuilding and in housing finance have boosted the cost of home ownership from its traditional 25 percent of family income to more than 40 percent, according to one recent study. It can be expected that as incomes rise and mortgage rates fall, this ratio will decline in the years ahead.

Contrary to conventional wisdom, the 25-percent increase in the price of new housing over the past three years has not resulted in more than token shrinkage in the size of newly built one-family units. The most that can be said is that the steady trend of increased square footage per unit stopped rising in 1979 when inflation hit double digits and has been holding more or less steady at an average of close to 1,600 square feet in the years since.

Over the same period, multi-family units began growing in size, taking on an additional 50 square feet since 1979. The reason: a rising proportion of condominiums in the total supply of multi-family units. The obvious implication: As cost rose sharply, first-time buyers substituted condos (bigger than rental apartments, but smaller and less expensive than even the cheapest one-family homes) for the traditional "starter house." Thus, one consequence of inflation has been an increase in the size of multi-family units rather than a shrinkage of one-family homes. For all shelter (houses, condos, and apartments) taken together, however, the tradeoff has meant a net loss in square footage of about 5 percent since 1979.

1983 National Estimates Dodge Construction Potentials

Nonresidential Buildings		1981 Actual	1982 Preliminary*	1983 Forecast	Percent Change 1983/82
Floor Area (millions of square feet)	Office Buildings	317	253	175	−31
	Stores & Other Commercial	404	302	340	+13
	Manufacturing Buildings	185	115	125	+ 9
	Total Commercial & Manufacturing	906	670	640	− 4
	Educational	74	74	75	+ 1
	Hospital & Health	60	63	65	+ 3
	Other Nonresidential Buildings	126	108	110	+ 2
	Total Institutional & Other	260	245	250	+ 2
	Total Nonresidential Buildings	1,166	915	890	− 3
Contract Value (millions of dollars)	Office Buildings	$ 19,268	$ 16,925	$ 12,800	−24
	Stores & Other Commercial	11,733	10,250	12,200	+19
	Manufacturing Buildings	7,530	8,900	6,750	−24
	Total Commercial & Manufacturing	$ 38,531	$ 36,075	$ 31,750	−12
	Educational	$ 5,819	$ 6,125	$ 6,650	+ 9
	Hospital & Health	6,218	6,850	7,575	+11
	Other Nonresidential Buildings	7,681	7,500	8,100	+ 8
	Total Institutional & Other	$ 19,718	$ 20,475	$ 22,325	+ 9
	Total Nonresidential Buildings	$ 58,249	$ 56,550	$ 54,075	− 4

*Eight months actual; four months estimated.

Outlook 1983
Residential Building

As the housing market begins its next cyclical advance, the factors that will govern the volume and mix of building in 1983 are:

- *Demographics:* In the first half of the 1980s, most growth of the population is concentrated among households headed by 35- to 44-year-olds. Home ownership typically takes a large jump at this age (from 50 percent among 25- to 34-year-olds to over 70 percent), provided credit conditions and affordability permit.

Residential Buildings

		1981 Actual	1982 Preliminary*	1983 Forecast	Percent Change 1983/82
Dwelling Units (thousands of units**)	One-Family Houses	674	615	825	+34
	Multifamily Housing	450	410	500	+22
	Total Housekeeping Residential	1,124	1,025	1,325	+29
Floor Area (millions of square feet)	One-Family Houses	1,079	970	1,300	+34
	Multifamily Housing	478	410	520	+27
	Nonhousekeeping Residential	60	60	55	− 8
	Total Residential Buildings	1,617	1,440	1,875	+30
Contract Value (millions of dollars)	One-Family Houses	$ 38,363	$ 36,850	$ 53,100	+44
	Multifamily Housing	17,821	16,800	22,900	+36
	Nonhousekeeping Residential	3,879	4,325	4,100	− 5
	Total Residential Buildings	$ 60,063	$ 57,975	$ 80,100	+38

Nonbuilding Construction

Contract Value (millions of dollars)	Highways & Bridges	$ 11,126	$ 12,000	$ 12,000	—
	Sewer & Water	7,677	7,250	6,750	− 7
	Other Public Works	5,891	6,350	6,050	− 5
	Total Public Works	$ 24,694	$ 25,600	$ 24,800	− 3
	Utilities	$ 7,183	$ 9,000	$ 8,500	− 6
	Total Nonbuilding Construction	$ 31,877	$ 34,600	$ 33,300	− 4

All Construction

Contract Value (millions of dollars)	**Total Construction**	$150,189	$149,125	$167,475	+12
	Dodge Index (1977 = 100)	107	107	120	

*Eight months actual; four months estimated. **F.W. Dodge basis.

- *Mortgage Money:* Retreating interest rates will begin to be more supportive of underlying demographics in 1983, letting the market move back in the direction of increased home ownership (one-family homes *and* condos) relative to apartments.

- *Affordability:* For first-time buyers especially, the high cost of housing will sustain the recent popularity of condominiums as a substitute for the no-longer-available "no frills" one-family house.

While it is difficult to quantify these crosscurrents in the housing market, the directions that the mix of homebuilding will be taking are reasonably clear. Condominiums and one-family houses should show the strongest gains in 1983 (in that order), as falling mortgage rates let more of the demographic potential of the 1980s be realized. Apartment construction is estimated to gain also, but only by half as much.

When classified on the basis of occupancy (owner vs. renter), the combined total of condos and one-family houses is expected to advance by as much as 40 percent next year—several times as fast as apartments. However, when the market is grouped according to structure type (one-family vs. multi-family, including condominiums with multi-family structures), the potential for gain in 1983 is more balanced: 30 to 35 percent for one-family homes; 20 to 25 percent for multi-family units.

At 1983 costs, next year's 1.875 billion square feet of residential building means a prospective gain of nearly 40 percent in construction contract value to $80.1 billion. (A note on where inflation has taken the housing market over five years: 1983's estimated 1.325 million dwelling units will cost more in total than the 2.0 million units built in 1978!)

Residential Building Contract Value

Seasonally adjusted annual rates, in billions of dollars

Year/Quarter		Total	One Family	Multi-Family*
1982	I	$52.2	$35.3	$16.9
	II	55.2	34.9	20.3
	III	59.0	37.0	22.0
	IV	65.4	40.2	25.2
1983	I	70.8	45.6	25.2
	II	77.9	51.3	26.6
	III	83.4	55.6	27.8
	IV	88.4	59.9	28.5
1982		$58.0	$36.9	$21.1
1983		80.1	53.1	27.0
% Change		+38	+44	+28

*Includes Nonhousekeeping Residential Buildings

Nonresidential Building

There are a few hard and fast guidelines to forecasting the nonresidential building market when it is near the bottom of its cycle, and none of them offers much help for this market in 1983. One is that if nonresidential building is to improve, it needs the environment of a strong economy, but the current economic recovery is both overdue and underpowered. Another guideline is that the nonresidential building cycle normally lags general economic activity at the lower turning point. Remember that after the mid-1970s' recession, it took a year for nonresidential contracting to respond to improving economic conditions, and there is no reason to expect a quicker reaction this time. A third rule is that no two cycles are exactly alike. Over the next few years, two special situations–the adjustment to an overbuilt office market and the scarcity of public funds for institutional building–will take the next recovery of nonresidential building along an unfamiliar path.

Economic Support for Nonresidential Building in 1983

Third-quarter statistics failed to deliver evidence that the "strong" recovery scheduled to take hold in 1982's second half in response to the midyear tax cut had arrived. Furthermore, it is now conceded–even by Administration economists–that when the overdue recovery finally begins, it will be weaker than anticipated. Typically, growth in the initial phase of cyclical expansion averages 5 to 6 percent (real GNP, annual rate); this one will weigh in at more like 3 percent. The problem: a narrow base of support.

If the size of the 1982 and 1983 federal deficits are any gauge, fiscal thrust is abundant. But obviously, it is not enough. Tax reduction, which must be converted into private-sector spending (or investment) to become effective, does not have the same initial stimulative impact as direct public spending. And military spending–the one area where federal outlays are being greatly expanded–is notoriously ineffective as a creator of civilian jobs.

Outside the realm of fiscal policy, there is little to add strength to an incipient recovery. Interest rates are winding down, but only from very high to quite high. Even as rates decline, this recovery will be left at a monetary disadvantage compared with past cycles when lower rates were enjoyed. Consumers have so far shown little inclination to spend their tax bonus. Homebuilding, usually a countercyclical industry which helps lead the economy out of recession, remains deeply depressed. State and local governments are being squeezed by restraint on federal grants-in-aid from one side and a recession-weakened tax base from the other. Business capital spending, which is characteristically at its lowest when the economy emerges from recession, will be retarded by unusually high excess capacity this time around.

It adds up to this: A recovery that is expected to be self-generated within the private sector by tax reduction may eventually develop into a less inflationary prosperity, but it will take longer getting there than a recovery that enjoys a combination of private- and public-sector support.

The Nonresidential Building Lag

Like other forms of business capital spending, commercial and industrial building lags general economic activity, and that lag is most conspicuous during the transition from recession to recovery. The delay can last as much as a year, giving the nonresidential building cycle its long, flat bottom.

One reason for the lag is that there is little incentive (other than relocation and modernization) to add new productive facilities when industry is already burdened with an excess as it comes out of recession. Less than 70 percent of capacity is being used at present, and experience shows that only minimal industrial building takes place below 80-percent utilization.

Another reason for the nonresidential building lag is the heterogeneous makeup of this market. Composed of half a dozen or more individual building types (stores, warehouses, offices, factories, etc.)–each with its own unique cycle–the turning point of the total nonresidential building cycle is a blurred composite of several individual turning points. This means that, as nonresidential building begins to recover, its turnaround will take place sequentially–not all at once.

Stores and Warehouses

The nonresidential recovery sequence always begins with retail building. And because retail building is a derivative of housing (not retail trade), the prerequisite to the recovery of retail building is a sustained rise of homebuilding.

Contracting for stores and shopping centers has been in almost steady decline since early in 1979, when the rate of retail building reached a peak of 300 million square feet (annual rate). The subsequent slide to only 155 million square feet in 1982's third quarter closely paralleled the downward path of homebuilding, allowing for a brief lag.

In yet another way, the retail building market has been assuming the characteristics of residential building. During the recent period of extremely low volume of new construction, additions and alterations to existing retail facilities have increased to 25 percent of total work. Closing in or "malling" older shopping centers is one important aspect of this recent trend.

A sustained expansion of housing starts, beginning in 1982's third quarter, and continuing through 1983 and into 1984, should provide what it takes to trigger the recovery of retail building. Allowing for the usual lag, the second half of 1982 should be the low point of the current retail building cycle, with improvement taking hold in 1983's opening quarter. A gain from a starting rate of 125 million square feet in 1983: I to 160 million by 1983: IV would put the year's total at 145 million square feet, up 20 percent from the 1982 recession low, and establish the start of the next cyclical upswing.

Construction of warehousing space has been growing relative to square footage of stores over the past decade, suggesting more intensive usage of selling space. Since the mid-1970s, the cumulative total of warehouse construction has matched square footage for store space on a one-for-one basis, compared with a ratio of 0.75:1 during the first half of the decade, when merchandise was kept closer to the point of sale.

The relationship between contracting for warehouses and stores varies over the building cycle, however. Because stores are normally built first, and warehouses added as the need arises, store construction logically leads warehouse construction around the cycle. In 1982, when the retail building market was sta-

ble, though depressed, warehousing and selling square footage were holding to their normal one-to-one ratio (stores, 120 million square feet; warehouses, 120 million). As the direction of the cycle changes next year, stores will lead warehouses in recovery, pulling the ratio down to a low of about 0.95:1. With store construction estimated at 145 million square feet in 1983, next year's forecast of warehouse contracting is 140 million square feet.

Industrial Building

Just as retail building usually leads the several categories of nonresidential building into recovery, industrial building is normally the last to respond. With industrial capacity utilization now below 70 percent, the huge volume of excess capacity that must be absorbed during the next several quarters will delay the recovery of manufacturing building in 1982/83 as it did following the mid-1970s' recession. At that time, industrial construction stagnated for eight successive quarters (1975:II to 1977:I), until capacity utilization climbed its way back across the 80-percent threshold–the usual trigger point for a new round of expansion.

When recovery of industrial construction finally takes hold, it will begin from an even lower starting place than in 1977. The recurring recession of the 1980s steadily reduced the volume of industrial building to only half its 1979 peak volume of 243 million square feet to an estimated 1982 total of 115 million –35 million square feet below the 1975/76 recession level.

There is no mystery, either by region or by industry, as to where the greatest weakness in manufacturing building lies. Not surprisingly, the Midwest has borne the brunt of the cutback. In that region, the three-year slide amounted to 60 percent–half again as much as the 40-percent declines in the Northeast, South, and West. The Midwest's two key industries–autos and steel–are currently doing less than one-third the building in 1982 that they did in 1979. For steel, it has been a steady decline over the period. The auto industry, by contrast, *increased* plant construction in 1980 and 1981, but apparently threw in the towel in 1982.

Building materials manufacturers (as represented by the lumber and the stone-clay-glass industries) were also among those forced by weak markets to retrench in the early 1980s. Successive cutbacks reduced building products manufacturers' 1982 plant construction to only one-third the square footage of 1979's strong volume.

With the prospect of a less-than-robust recovery for the economy in 1983, it is unlikely that next year's limited industrial growth will absorb the 10 or more percentage points of unused capacity needed to reach 80-percent utilization. Experience under similar circumstances in the middle 1970s cautions that if the decline of industrial construction contracting has finally leveled off at 115 million square feet (as it appears), that is where it will stay for quite a while. The possibility of modest improvement toward the end of 1983 makes room for a small increase for the year to 125 million square feet.

Note: Although 1983 square footage of manufacturing building is estimated to be slightly higher than in 1982, next year's contract value will be *lower*. The reason: the inclusion in 1982's total of the Great Plains coal gasification plant in Beulah, North Dakota. This $2.1-billion project involved only a nominal amount of square footage of enclosed structures. Plans for additional synfuel facilities next year are still too unsettled at this point to include their value in the 1983 estimates.

Offices

While it is reasonable to expect that both retail building and industrial construction will sooner (stores) or later (factories) respond to improving economic conditions in their accustomed way, the same cannot be said about offices. The recent boom in office building, which provided welcome support to an otherwise weakening nonresidential market for the past two years, is due for a major correction.

Somewhere along the second half of 1981 (a year in which an unheard-of total of 317 million square feet of space was started), the office boom began to outrun its demographic base, turning into a speculative bubble. A "soft landing" was still possible at the middle of 1981, when the supply of forthcoming space was in rough balance with the requirements of a rapidly growing white-collar work force. But the boom wouldn't quit. In 1981's second half, even more new office space was started than in that year's first half, and still more has been started so far in 1982.

Meanwhile, circumstances have changed on the demand side of the office equation. The main thrust behind the office boom–an explosive surge of white-collar labor-force growth–actually reached its peak before 1980 and has since been diminishing. This gradually waning demographic support has more recently been compounded by deep recession and rising unemployment–just as the bulk of the office space that was started in the last 18 months is coming on the market. The collision of supply and demand in 1982's closing months means sharply rising vacancy rates ahead. The inevitable adjustment to oversupply will be a heavy drag on the recovery of the nonresidential building market in 1983 (and in 1984 as well).

To some degree, the correction is already in progress. The seasonally adjusted annual rate of contracting reached its peak of 338 million square feet in the third quarter of 1981, and by a year later (1981:III), the rate of contracting had eased to 253 million square feet. But by contrast, the current sustainable demand (based on projected growth of the white-collar labor force) is estimated at not more than 225 million square feet. Considering the substantial excess supply that still needs to be worked off, the present imbalance in the market implies a cutback of new construction to something well below 200 million square feet for the next year or two.

Because the office-building boom of 1979-1981 overstayed its welcome, the coming correction is more likely to be severe than gentle. A sharp decline in 1983, from 1982's estimated 253 million square feet to the upper end of the range of 150 to 175 million, will only partially reduce the excess supply. Still another year (1984) of building at this reduced volume will be required before the volatile office market can again support an annual rate of 200 million or more square feet.

Institutional Building

The institutional building market–schools, public administration buildings, hospitals, etc.–recently entered the second stage of a long decline that covered much of the decade of the 1970s. The initial phase, a retreat from a plateau of 400-450 million square feet annually from 1970 to 1974 to a lower plateau of 300 million square feet at the end of the decade, was due largely to nonfinancial reasons: shifting demographics (schools) and overbuilding (hospitals).

Just when it was beginning to look as though the necessary adjustment to changed requirements of the marketplace had been made, contracting for institutional building took a secondary decline in 1981 to 250 million square

feet. This further slippage was due to the withdrawal of financial support as federal fiscal restraint turned state and local budgets from surplus to deficit in short order. Contracting in 1982 has shown no rebound from the prior year's loss.

The Reagan Administration's "New Federalism" puts the future of institutional building in a new and more doubtful context. For the next several years, state and local governments will be required to supplement shrinking federal funding from other sources–a process that can only affect institutional building adversely. On the other hand, the heavily negative influence that educational building has had on total institutional building during most of the 1970s has about run its demographic course. As alternatives to federal funding are developed, gains in some categories in this group are expected to begin reversing the long downward trend of institutional building. Nevertheless, it will take until the middle of the decade before the level of building again reaches 300 million square feet–the point at which the secondary decline began.

Outlook 1983
Nonresidential Building

The near future offers too many handicaps to permit a recovery of nonresidential building before the second half of 1983. A sluggish comeback of the economy, the normal lag of commercial and industrial building, an overdue unwinding of the office building boom, and the limited availability of public funds for institutional building

1983 Regional Estimates
Dodge Construction Potentials

Northeast	Connecticut, District of Columbia, Delaware, Massachusetts, Maryland, Maine, New Hampshire, New Jersey, New York, Eastern Pennsylvania, Rhode Island, Virginia, Vermont	**1981 Actual**	**1982 Preliminary***	**1983 Forecast**	**Percent Change 1983/82**
Contract Value (millions of dollars)	**Nonresidential Buildings**				
	Commercial and Manufacturing	$ 7,489	$ 6,350	$ 6,000	− 6
	Institutional and Other	4,406	3,975	4,400	+11
	Total	$11,895	$10,325	$10,400	+ 1
	Residential Buildings				
	One-Family Houses	$ 5,791	$ 5,225	$ 7,675	+47
	Multifamily Housing	3,242	3,025	4,250	+40
	Nonhousekeeping Residential	726	1,050	825	−21
	Total	$ 9,759	$ 9,300	$12,750	+37
	Nonbuilding Construction				
	Highways and Bridges	$ 1,897	$ 2,225	$ 2,125	− 4
	Other Public Works	2,775	2,875	2,600	−10
	Utilities	441	1,200	500	−58
	Total	$ 5,113	$ 6,300	$ 5,225	−17
	Total Construction	$26,767	$25,925	$28,375	+ 9
Midwest	Northern Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, North Dakota, Ohio, Western Pennsylvania, South Dakota, Wisconsin, West Virginia				
Contract Value (millions of dollars)	**Nonresidential Buildings**				
	Commercial and Manufacturing	$ 6,658	$ 6,800	$ 5,100	−25
	Institutional and Other	4,281	4,325	4,500	+ 4
	Total	$10,939	$11,125	$ 9,600	−14
	Residential Buildings				
	One-Family Houses	$ 5,956	$ 5,300	$ 7,475	+41
	Multifamily Housing	2,773	2,400	3,175	+32
	Nonhousekeeping Residential	549	550	525	− 5
	Total	$ 9,278	$ 8,250	$11,175	+35
	Nonbuilding Construction				
	Highways and Bridges	$ 2,854	$ 3,025	$ 2,875	− 5
	Other Public Works	2,699	2,750	2,425	−12
	Utilities	1,475	2,500	1,200	−52
	Total	$ 7,028	$ 8,275	$ 6,500	−21
	Total Construction	$27,245	$27,650	$27,275	− 1

*Eight months actual; four months estimated.

South

Alabama, Arkansas, Florida, Georgia, Southern Illinois, Kansas, Louisiana, Mississippi, Missouri, North Carolina, Nebraska, Oklahoma, South Carolina, Tennessee, Texas

Contract Value (millions of dollars)

	1981 Actual	1982 Preliminary*	1983 Forecast	Percent Change 1983/82
Nonresidential Buildings				
Commercial and Manufacturing	$14,279	$13,450	$12,250	− 9
Institutional and Other	6,900	7,475	8,275	+11
Total	$21,179	$20,925	$20,525	− 2
Residential Buildings				
One-Family Houses	$17,043	$17,475	$25,525	+46
Multifamily Housing	6,996	7,400	9,875	+33
Nonhousekeeping Residential	1,552	1,650	1,650	—
Total	$25,591	$26,525	$37,050	+40
Nonbuilding Construction				
Highways and Bridges	$ 4,275	$ 4,125	$ 4,350	+ 5
Other Public Works	4,563	4,725	4,600	− 3
Utilities	1,285	2,600	5,000	+92
Total	$10,123	$11,450	$13,950	+22
Total Construction	$56,893	$58,900	$71,525	+21

West

Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

Contract Value (millions of dollars)

Nonresidential Buildings				
Commercial and Manufacturing	$10,105	$ 9,475	$ 8,400	−11
Institutional and Other	4,131	4,700	5,150	+10
Total	$14,236	$14,175	$13,550	− 4
Residential Buildings				
One-Family Houses	$ 9,573	$ 8,850	$12,425	+40
Multifamily Housing	4,810	3,975	5,600	+41
Nonhousekeeping Residential	1,052	1,075	1,100	+ 2
Total	$15,435	$13,900	$19,125	+38
Nonbuilding Construction				
Highways and Bridges	$ 2,100	$ 2,625	$ 2,650	+ 1
Other Public Works	3,531	3,250	3,175	− 2
Utilities	3,982	2,700	1,800	−33
Total	$ 9,613	$ 8,575	$ 7,625	−11
Total Construction	$39,284	$36,650	$40,300	+10

*Eight months actual; four months estimated.

add up to a delayed response.

In 1983's first half, expected improvement in contracting for stores and warehouses will be overbalanced by sharply declining office building, and total nonresidential contracting will reach its cyclical low of about 875 million square feet (annual rate). Then, as office building begins to stabilize in the second half, gains in other categories will lift contracting above 900 million square feet by the final quarter.

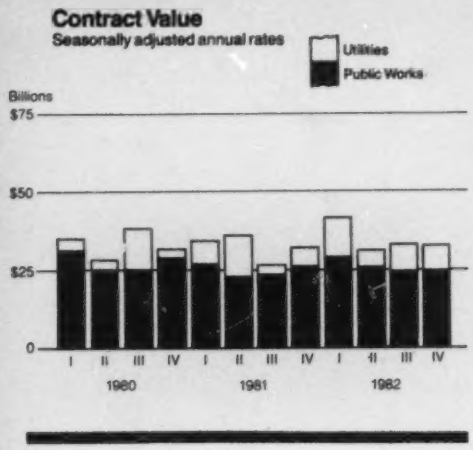
Next year's total of 890 million square feet means a further small (3 percent) reduction of nonresidential square footage, completing the two-stage decline that began as long ago as 1980. Contract value in 1983, totaling $54.1 billion, will reflect a different and less costly mix of nonresidential building types–mostly the result of the tradeoff between retail building and offices.

Nonresidential Building Contract Value

Seasonally adjusted annual rates, in billions of dollars

Year/Quarter		Total	Commercial/ Industrial	Institutional
1982	I	$62.3	$41.6	$20.7
	II	55.1	35.3	19.8
	III	55.7	34.9	20.8
	IV	53.1	32.5	20.6
1983	I	52.9	31.3	21.6
	II	52.8	30.7	22.1
	III	54.5	31.9	22.6
	IV	56.0	33.0	23.0
1982		$56.5	$36.0	$20.5
1983		54.1	31.8	22.3
% Change		−4	−12	+9

Nonbuilding Construction



Public Works

In times of recession, public works construction normally expands. By tradition, public works construction usually serves as an antirecessionary safety net for the economy. This rescue function has always been secondary to the main purpose of the several federal programs that provide funds for the long-term needs of the nation's cities for streets, mass transit, sewers, and water. Nevertheless, the practice of temporarily increasing public works spending in times of recession has ample precedent. The most recent example: Rounds I and II of the Accelerated Public Works program, which pumped a total of $6 billion into the economy to help speed recovery from the mid-1970s' recession.

This time it's different. As evidence of how things have changed, an attempt–in September–at passage of a $1-billion public works jobs bill for the repair of bridges, roads, and water systems never garnered enough votes in Congress to get the presidential veto that it most certainly would have received.

As the "New Federalism" concept is applied, public works will be last among the three major categories of construction to adjust to the Reagan Administration's redirection of economic priorities. The consequences of the proposed transfer of responsibility from federal to local governments for all but a few functions (e.g., justice and defense) can already be seen in the recent decline of public-works construction. With federal programs currently funded at approximately 85 percent of authorization, and with state and local governments unable to make up all of the shortfall, total contracting for public-works construction has declined by 15 percent since 1979–from a peak of $29.2 billion to the current $25.5 billion. After adjustment for inflation, the three-year shrinkage is more like 30 percent *in real terms*. With further reduction of funding of federal programs in store for the next several years, the eventual reversal of the decline of public-works construction rests entirely with state and local governments.

The "federalism initiative"–as the Administration calls its proposal to transfer some 40 or more federal programs to state and local governments (with the help of a temporary trust fund to smooth the transition)–has received mixed reviews so far and remains a long way from implementation. In 1983, as the merits of this plan are debated in Congress and as a program emerges, look for more "de facto federalism" (i.e., deeper cuts in federal programs without much regard for the consequences). The record to date clearly shows that the federal government is more adept at cutting public works spending than local governments are at replacing it.

The federal budget for fiscal year 1983, still subject to change even though the fiscal year began October 1, is the best guide to federal spending for public construction next year; but budgeted outlays must be considered as the upper limit for 1983. Although there was not much change in planned spending for public works between the initial FY83 budget (February) and its first resolution (June), all domestic spending is vulnerable to ongoing review (translation: further cuts) in the attempt to hold 1983's ballooning deficit below $150 billion.

Five budget categories–highways, urban mass transit, environmental protection, airports, and natural resources–provide the major federal grants to state and local governments for public works construction, accounting for more than two-thirds of total annual contract value. In addition, the federal government is directly involved in a limited amount of direct construction (e.g., interstate highways and military construction). Grants to state and local governments are presently slated for a total of $16.3 billion in FY83–*9 percent less* than 1982's total of $18.0 billion. Until further notice, highways are budgeted to receive the same funding in 1983 as in 1982, but the other categories have been slashed 15 to 20 percent.

Besides these federal grants to state and local governments, the 1983 budget provides for a 50 percent *increase* in funds for military construction ($4.0 billion). Much of this work will be done at bases in foreign countries and will not be included in Dodge construction data, which cover only the United States.

Although federal funding for domestic public works construction will shrink once again in 1983, local governments will attempt to raise their outlays to the extent that they can. Declining interest rates should make the municipal bond market a better source of funds in 1983 than it has been for the past two years.

The tradeoff between federal and local funding of public works construction nets out as another decline in 1983. A total of $24.8 billion is forecast (vs. an estimated $25.6 billion in 1982), with highway spending unchanged and waste water treatment facilities the biggest loser.

Are User Taxes the Answer?

Much has been written lately about decaying bridges and car-swallowing potholes. Latest to add its voice to the outcry against the neglect of the nation's infrastructure is the Regional Plan Association. In a report analyzing the New York area (an analysis which may be equally valid for Chicago, Atlanta, Los Angeles, and even modern Houston), the RPA concludes: "Unless the coming decade sees virtually unprecedented levels of capital expenditure on the region's infrastructure, economic development efforts may be fatally handicapped from the start."

Clearly, inadequate investment in the maintenance and development of the infrastructure sets limits on the future growth of the nation's cities, as it does on the growth of the construction industry itself. Space limitations here preclude a thorough discussion of this important issue. Perhaps the case for often invisible and rarely appreciated public works construction can be made by a few rhetorical questions:

- Without adequate sewer and water development, how much housing can be built?
- Without more roads and/or mass transit, how many shopping centers and office/industrial parks can be built?
- Without large-scale regional water resource development, what are the limits to growth of the arid Southwest?
- Are user taxes really the answer?

Utilities

Because very large projects dominate utility construction, forecasting this category is essentially a matter of tracking individual projects from the planning stage to the start of work. But, due to the

small number of project starts each year, the possibility of postponement or cancellation of one or two jobs makes this a high-risk area of forecasting.

In 1982, a total of only 12 major projects–the $1.6-billion Northwestern segment of the Alcan gas pipeline, two smaller pipelines, and nine electric power plants–accounted for 80 percent of the year's estimated total of $9.0 billion of utility construction. The current year's electric power plants, which averaged just over $500 million each, were distributed quite evenly among the regions.

Analysis of more than 50 utility projects planned for the next several years disclosed a total of nine electric utilities with a high probability of starting in 1983. No major new pipeline construction is currently scheduled for 1983, however. Next year's power plants will be concentrated in the Southwest, with three in Texas alone.

The 1983 total of all utility construction contract value is estimated at $8.5 billion.

Outlook 1983
Nonbuilding Construction

Without the prospect for gain in either public works or utility construction next year, total nonbuilding construction contract value will decline 4 percent to an estimated $33.3 billion in 1983.

Nonbuilding Construction Contract Value

Seasonally adjusted annual rates, in billions of dollars

Year/Quarter		Total	Public Works	Utilities
1982	I	$41.4	$27.9	$13.5
	II	30.5	25.2	5.3
	III	33.4	24.5	8.9
	IV	32.2	24.9	8.3
1983	I	32.7	24.7	8.0
	II	29.5	24.8	4.7
	III	33.2	24.8	8.4
	IV	37.8	24.9	12.9
1982		$34.6	$25.6	$ 9.0
1983		33.3	24.8	8.5
% Change		−4	−3	−4

What Kind of Recovery Is This?

Unlike the brief 1980 recovery, which lasted for only as long as the Federal Reserve took the pressure off the credit market, the recovery that is now taking hold is made of more durable stuff. Interest rates are not only declining, but will be coming down further and should stay down for a while. With inflation under control and not likely to flare up in the next year or two, the Fed has a responsibility to encourage the economy's recovery with lower interest rates. There is very little reason for the Fed to retighten credit in 1983 as it did in 1981. This difference opens the door to a long-overdue expansion of the housing market.

In 1983, however, an improvement in housing is just about all the construction industry is likely to see. The induced recession that brought inflation down is still very much with us. Recovery of the economy is still barely evident as yet, and its development through 1983 will be weaker than in previous upswings. This closes the door to the recovery of commercial and industrial building for most of 1983. But provided that the 1983 housing recovery isn't short-circuited by another round of credit restraint, it is possible to anticipate the reinforcement of the residential expansion by a revival of nonresidential building late in 1983.

As this happens, 1983 could be the start of a new period of recovery and expansion of the depressed construction market that will gather momentum over the next several years. Welcome as that prospect may be, it is important to be aware of the ways in which it will be different from past periods of market expansion.

Under the "politics of limits," the construction industry must learn to adapt to the withdrawal of the public funding which–directly or indirectly–has financed as much as a third of total construction activity in past decades. *Housing*, by long tradition a mixture of private enterprise and public subsidy, will be lacking much of its former federal backing. *Public works construction* will continue to wane as it has in the past few years, until it stabilizes at a volume that local governments can maintain.

These new constraints set lower limits to the expansion of the construction industry in the "Laissez-faire Eighties" than in the "Social Seventies"–and give it a different direction, as well. In keeping with the reshaping of the economy as a whole, *private* sector opportunities for new construction and rehabilitation of existing structures are the keys to the construction industry's future.

Total Construction Contract Value

Seasonally adjusted annual rates, in billions of dollars

Year/Quarter		Nonresidential Building	Residential Building	Nonbuilding Construction	Total Contruction
1982	I	$62.3	$52.2	$41.4	$155.9
	II	55.1	55.2	30.5	140.8
	III	55.7	59.0	33.4	148.1
	IV	53.1	65.4	33.2	151.7
1983	I	52.9	70.8	32.7	156.4
	II	52.8	77.9	29.5	160.2
	III	54.5	83.4	33.2	171.1
	IV	56.0	88.4	37.8	182.2
1982		$56.5	$58.0	$34.6	149.1
1983		54.1	80.1	33.3	167.5
% Change		−4	+38	−4	+12

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